

WHAT IS CLAIMED IS:

1 1. A content exchange apparatus for cacheing content objects, the
2 content exchange apparatus comprising:
3 a content store comprising a plurality of content objects;
4 a content tracker that determines the content objects stored in the content
5 store;
6 an origin server database comprising a list of origin servers associated with
7 the content exchange; and
8 a catalog of content objects stored in the content store.

1 2. The content exchange apparatus for cacheing content objects as
2 recited in claim 1, wherein the list of origin servers is modified to exclude a particular
3 origin server when a determination is made that the particular origin server is no longer
4 available.

1 3. The content exchange apparatus for cacheing content objects as
2 recited in claim 1, wherein the list of origin servers contains some origin servers that have
3 no content objects stored in the content exchange.

1 4. The content exchange apparatus for cacheing content objects as
2 recited in claim 1, wherein content objects associated with a particular origin server are
3 removed from the content store when a determination is made that the particular origin
4 server is no longer available.

1 5. The content exchange apparatus for cacheing content objects as
2 recited in claim 1, wherein:
3 the content store is divided into a first section and a second section;
4 the first section comprises a cache where less frequently requested content
5 objects are purged in favor of more frequently requested content objects; and
6 the second section comprises a file system where content objects remain
7 stored in the content store for a period of time regardless of request frequency.

1 6. The content exchange apparatus for cacheing content objects as
2 recited in claim 1, further comprising a content controller, wherein the content controller
3 finds a requested content object not presently retained in the content store.

7. The content exchange apparatus for caching content objects as recited in claim 1, further comprising a content controller, wherein the content controller finds a requested content object not presently retained in the content store on one of: another content exchange and the origin server.

8. The content exchange apparatus for cacheing content objects as recited in claim 1, further comprising an information repository comprising status information related to the content exchange.

9. A content storing system for cacheing content objects, the content storing system comprising:

a first content exchange;

a second content exchange; and

a content bus coupled to the first and second content exchanges, wherein:

the first content exchange comprises an origin server database

comprising a list of origin servers associated with the first content exchange, and

the list of origin servers contains a plurality of origin servers that

have no content objects stored in the first content exchange.

10. The content storing system for cacheing content objects as recited in claim 9, wherein the list of origin servers is modified to exclude a particular origin server when a determination is made that the particular origin server is no longer available.

11. The content storing system for cacheing content objects as recited in claim 9, wherein content objects associated with a particular origin server are removed from the content store when a determination is made that the particular origin server is no longer available.

12. The content storing system for cacheing content objects as recited in claim 9, wherein:

the second content exchange is divided into a first section and a second

the first section comprises a cache where less frequently requested content objects are purged in favor of more frequently requested content objects; and

7 the second section comprises a file system where content objects remain
8 stored in the second content exchange for a period of time regardless of request
9 frequency.

1 13. The content storing system for cacheing content objects as recited
2 in claim 9, wherein the content bus transports a requested content object not presently
3 retained in the first content exchange from the second content exchange.

1 14. The content storing system for cacheing content objects as recited
2 in claim 9, further comprising a content controller, wherein the content bus transports a
3 requested content object not presently retained in the first content exchange from one of
4 the second content exchange and an origin server.

1 15. A method for caching content objects in a content exchange, the
2 method comprising steps of:
3 storing content objects requested from the content exchange;
4 receiving information about an origin server from that origin server;
5 storing the information in a database;
6 determining a network address for the origin server using the database; and
7 contacting one of the origin server and another content exchange when a
8 content object request results in a cache miss.

1 16. The method for caching content objects in the content exchange as
2 recited in claim 15, wherein the database comprises an origin server identifier and an
3 origin server address for each associated origin server.

1 17. The method for caching content objects in the content exchange as
2 recited in claim 15, wherein the storing step comprises a step of storing an origin server
3 identifier and an origin server address for each associated origin server.

1 18. The method for caching content objects in the content exchange as
2 recited in claim 15, wherein the determining step comprises a step of querying the
3 database for an origin server address associated with a provided origin server identifier.

1 19. The method for caching content objects in the content exchange as
2 recited in claim 15, wherein the contacting step comprises steps of:

- 3 determining if any other content exchange has at least a portion of the
- 4 content object;
- 5 requesting the portion if the portion is found on any other content
- 6 exchange; and
- 7 requesting the portion from the origin server if the portion is not found on
- 8 any other content exchange.

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